SSGIC ArcIMS Administrators Workshop
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Meeting Notes

Participants:
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Objective:
This meeting was a follow up to the 3 days of ESRI ArcIMS training provided to this group of SSGIC ArcIMS administrators last month. The objective was to augment the ESRI training with information specific to the SSGIC Web server and its ArcIMS installation and configuration. Focus was on developing agency specific map services to meet stakeholder agency needs. The original hope was to have individual access to the web site and a "hands on" opportunity to begin developing these services. However, since DOI's access to the Internet has been temporarily denied by the courts, we were limited to a demonstration of the web site on John Guthrie's local notebook. Text in italics indicates responsibilities to complete tasks.

❖ **Ideas for initial agency specific projects**
Each agency ArcIMS administrator presented the direction that he/she anticipates moving toward to support agency goals:

- Karen – Local area burn plans and coordinating with other agencies.

- Jolia Koo – No short term need at the regional level. *She will talk to the units and see what their needs might be*. CDF is concerned about security and how public the data will be?

- Craig – Looked at the SSGIC web site with Diane Travis. They considered posting a map for review as part of NEPA compliance. Other ideas were woodcutting areas or fire restriction areas. The monument plan is a current major issue, but it may be too controversial for an initial project. They will look towards a small initial project.

We discussed the possibility that each of us set as a goal creating an agency specific map service. Before this can occur, we need step-by-step documentation (cookbook style). *Anne will develop this document and distribute*.

❖ **SSGIC Web Server hardware**
   John reviewed the web server hardware. It has dual processors with 50 gigabytes of available disc space. It is expandable with up to four processors (2 more) and 7 additional harddrives (it currently has 3). It has dual power supplies and can be expected to be online 99% of the time. The operating system is Windows 2000. It is currently located in the "DMZ" outside of the USGS firewall. It will meet SSGIC needs into the foreseeable future. However, the Sue6 server, on which any data in SDE would reside, is behind their firewall and access to this server is more restricted. Our ability to put stakeholder agency data on it is not clear. Which data will reside on the web server and which in SDE is not clear; John suggested that the base cartographic layers could go behind SDE now. The essential issue is to keep the ArcIMS administrators up to date on where the data resides.

❖ **Discussion of access to the Web server and ArcIMS**
   - Access to the web server and ArcIMS is via two routes: Terminal Services (TS) or drive mapping. TS client is part of Windows 2000, but if you are running NT 4.0 you will need to install it. Access via TS allows execution of ArcIMS modules Author, Designer, and Administrator as well as the web based ArcIMS Manager. Access via drive mapping only allows access to ArcIMS Manager, which may be a limitation. It is primarily an agency/individual preference. Mapping a drive to \\ssgic.cr.usgs.gov\web will access web pages (the location of axl files) and mapping to \\ssgic\cr\usgs\gov\data will enable data upload. The file structure implemented within each agency's space will be determined by the agency.

   - Each agency has a user profile on the web server. Currently we will all be sharing a single ArcIMS administrator account with a common user name and password. See Anne if you have difficulty logging on.

   - Current security implementation allows each agency exclusive write access to two subdirectories, one under \\ssgic.cr.usgs.gov\web\axl and one under \\ssgic\cr\usgs\gov\data. This will prevent accidental corruption of agency specific data. *John will ensure that these permissions are in place*. The vulnerable area will be the map services themselves. Since we only have a single ArcIMS administrator account, we will all have access to all map services and the potential exists to corrupt others map services (not the axl's supporting them).

   - To upload data to the Web server, utilize drag and drop between the mapped drive and your local drive. *John will implement permissions to allow each agency to drive map only to their agency directory.*

❖ **Rights and responsibilities as ArcIMS Administrators**
   - While each agency will have security for their axl files and data, access to map services themselves will be common. Consequently, we will need to exercise care when starting and stopping map services.

- The USGS expectation is that access to the SSGIC web server will be limited. User names and passwords for the server will remain limited to the current group of ArcIMS administrators. Please to not distribute.

❖ **Overview of John's custom SSGIC template and Web site organization**
John's reviewed his custom template. There are several places where it can be modified. They include the http command line, the ArcIMS params file, and ssgic banner .gif replacement with an alternative banner. *John will send a list of http command line parameters. Anne will make sure the options are in the procedures.* John suggested we maintain the "output clean up interval" at 5-10 minutes. This cleans up files in output as well as in memory. John also reviewed the current organization of viewers, map services, and file structure. *Agency specific directories for data and axl files are missing; Anne will correct. Stakeholder agencies can begin creating their own logos and a "look-and-feel" for their maps anytime.*

❖ **Summary of security and access permissions**
- Write access for each agency will be limited to the agency data subdirectory and axl file directory. .
- The current version of ArcIMS limits us to one ArcIMS administrator account. This means map services will be vulnerable to modification by others. Exercise care when modifying map services.
- Security for collaboration map services will be determined by subject matter specialists.
- At this time we will not implement collaboration passwords. The need for public access restrictions will be addressed as needed.
- Pat brought up security issues in terms of how public our data and analysis results should be in light of Sept. 11.
- *John will look into locking map services.* This will improve security
- We need to create a disclaimer statement for SSGIC. It needs to clearly state that SSGIC data is not agency provided data.

❖ **Discussion of modifications to functional design of "Map Portal" Web page**
After a lengthy discussion of alternative ways to organize access to the maps, we agreed on a scheme that accommodates selection by watershed or agency extents. An SSGIC overview button will load the SSGIC analysis area base cartographic data. Another button labeled "Detailed view by watershed" will access the same map service, but use the extents of the selected watershed. Buttons will follow to select natural resource related maps by either watershed or agency. Fire related maps will be implemented immediately, but the design will allow for the addition of other natural resources. An "Agency Specific Maps" button will link to the map services developed by each agency. Selection of an agency specific map may point to a map service also available by natural resource, i.e., the SEKI burn plan may be accessed via "Agency Specific Maps" and "Fire-Related Maps".

The pros and cons of implementing a single fire related map service as opposed to multiple map services was discussed. Initial implementation will be of a single map service and additional services will be added as needed.

❖ **John presented a demonstration on creating a map service.** The steps are outlined below:

1) Use ArcIMS Author to create a map configuration file. Select "new".
2) Add data from SSGIC data and/or agency specific data.
3) Use layer properties to modify legend and text. Modify labels and other properties to meet your needs for each theme. Save the axl file to webserver/web/axl/<agency_name>. This will not be the default; the user will need to edit the location.
4) Create a map service in ArcIMS Designer. John set up a custom template html viewer as the default.
5) Using ArcIMS Designer, create a web site, enter the web site directory and web page name. Specify the directory name. John has the default template set to the SSGIC custom template.
6) Customize the map service to meet agency needs in any of the several places described in the "cookbook" procedures. (Locations also identified above under "Overview of John's custom SSGIC template and Web site organization").
7) Start the map service in ArcIMS Administrator.